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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/182,499	10/30/98	HEYSE	

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EXAMINER

GHATT, D

ART UNIT	PAPER NUMBER
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2854

*8*

DATE MAILED: 10/01/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/182,499**

Applicant(s)  
**Heyse et al.**

Examiner  
**Dave Ghatt**

Group Art Unit  
**2854**



☒ Responsive to communication(s) filed on Sep 3, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 24-49 is/are pending in the application.

Of the above, claim(s) 48 and 49 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 24-47 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Claims 48 and 49 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions, the requirement having been traversed in Paper No. 7.
  
2. Applicant's election with traverse of claims 24-47 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the inventions are distinct from each other, each having a separate utility and different areas of classification, as outlined in paper No. 6. This is not found persuasive because the examiner disagrees with the statement that the relationship between the three groups of claims is such that a search of one necessarily involves a search for the others and that there is no undo burden placed on the examination process by considering two additional claims. In the case of claim 48 drawn to a tape spool, in order to execute a complete search, it is necessary to search class 400/242, which is not required for the examination of claims 24-47. Similarly, in the case of claim 49 drawn to a tape spool in combination with image receiving tape which has a releasable backing layer, it is necessary to search class 400/237 and class 428/195 which is not required for claims 24-47.

The requirement is still deemed proper and is therefore made FINAL.

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*Specification*

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

the meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import. The holder as recited in claim 39 line 2 for example, should be identified in the descriptive portion of the specification by reference to the drawing, **designating the part or parts therein** to which the term applies.

*Claim Objections*

4. Claim 43 is objected to because of the following informalities: in line 2 the applicant recites a "tape casstee". The applicant probably meant "tape cassette". Appropriate correction is required.

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*Claim Rejections - 35 USC § 112*

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

(c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

6. The specification is objected to under 37 CFR 1.71 because it does not provide basis for the tape cassette without a lid, as recited in claim 35. According to the specification and the drawings, Figure 2 for example, the claimed invention includes a lid 42. However, the applicant claims a cassette structure without a lid.

For this reason, claim 35 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification.

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7. Claims 24-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 is rendered indefinite due to the recitation “capable of selectively accommodating tape supplies” in lines 3-4. This language “capable of” is indefinite because it is not clear if the selectively accommodating feature is definitely required or not.

Claim 26 is rendered indefinite because it fails to further limit the parent claim. The language “wherein the tape is at least one of an ink ribbon tape and an image receiving tape, and wherein said image receiving tape comprises an image receiving layer and a releasable backing layer” further limits the tape, but the tape is not claimed as part of the apparatus. As recited in parent claim 24, the applicant claims a tape cassette **for** accommodating a supply of tape.

In claim 28, the recitation “the center line of the tapes” recited in lines 2-3 is indefinite since no center line has been defined. Claim 28 is also rendered indefinite due to the recitation “located in *the same plane*” in line 3. No plane has been defined and as a result it is not clear what structure the applicant is describing. The applicant recites “the same plane” but it is not known with respect to what is the plane defined. In other words, the applicant’s frame of reference is not defined. Claim 30 is indefinite due to similar recitations.

In claim 31 there is no antecedent basis for “a respective bobbin” as recited in line 2. Also in claim 31, it is not clear what is meant by “spring *shipping* on one of said housing”.

In claim 32 there is no antecedent basis for “said associated bobbin” as recited in line 1.

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Claims 36-38 are indefinite since they improperly modify parent claim 35. According to the language of claim 3 line 7, a cassette "without a lid" is required. However in claims 36-38 a lid is required. For example claim 36 lines 1-2 recites, "a lid situated opposite to said bottom surface", which is improper.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 24-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Umbach. As clearly illustrated in Figures 2, 4, and 6, Umbach teaches a tape cassette 12 for accommodating a supply of printable tape and suitable for being detachably mounted into the cassette. As outlined in column 8 lines 18-20, Umbach teaches a tape cassette 2 having a means, bobbins 8 and 12, for inserting and removing a tape ribbon supply 7 into the cassette. As outlined in column 8 lines 21-26, the bobbins are releasably held on post 4 and 5. As taught by Umbach in column 7 lines 10-17, the cassette 2 includes means for selectively accommodating tape supplies of different tape width.

With respect to claim 25 and the bobbins defining a surface and each of the post having a datum surface which interacts with the surface of its respective bobbin such that it defines the

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position of the bobbin in the axial direction, these datum surfaces are inherent to the invention of Umbach, and must exist in the arrangement as illustrated in Figure 4, in order for the apparatus of Umbach to be operable.

With respect to claim 28, insofar as "*the center line of the tapes is located in the same plane*" could be understood, Umbach teaches as illustrated in Figure 6, a center line parallel to the axis of rotation, which is located in the same plane (parallel to the central axis of the pins), this plane independent of the width of the tape.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 29, 30, 35, 44, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umbach in view of Wolynski et al. Umbach teaches a tape cassette 12 for accommodating a supply of printable tape and suitable for being detachably mounted into the cassette. As outlined in column 8 lines 18-20, Umbach teaches a tape cassette 2 having a means, bobbins 8 and 12, for inserting and removing a tape ribbon supply 7 into the cassette. As outlined in column 7 lines 10-17, the cassette taught by Umbach also includes means for selectively accommodating tape supplies of different tape width. In fact, Umbach teaches all the claimed



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structure except for a bobbin with an internal flange that mates with a rib on the post. As illustrated in Figures 1 and 5, Wolynski et al. teaches a tape cassette similar to the one taught by Umbach for detachably loading a tape device, which includes a bobbin 4. As outlined in column 3 lines 29-36, the bobbin taught by Umbach includes flange portion 16 which mates with a drive post (not illustrated) which must include interlocking ribs. To one of ordinary skill in the art, it would have been obvious to include in the invention of Umbach, interlocking flange and rib portions for the bobbin and post as taught by Wolynski et al. in order to ensure that there is no slipping between these elements. Furthermore, there is nothing unobvious in this arrangement since mating elements on interlocking bobbins and drive post are routinely used in tape cassettes as a means to advance ribbons.

With respect to claim 30, insofar as "*the center line of the tapes is located in the same plane*" could be understood, Umbach teaches as illustrated in Figure 6, a center line parallel to the axis of rotation, which is located in the same plane (parallel to the central axis of the pins), this plane independent of the width of the tape.

With respect to claims 35, 44, 46, and 47, although Umbach does not teach a lid for the tape cassette, Wolynski et al. teaches a cassette with a hinged lid 22 opposed to the cassette base, as illustrated in Figure 1. As outlined in column 4 lines 59-61, the lid can be opened and closed as necessary. To one of ordinary skill in the art, it would have been obvious to include a lid as taught by Wolynski et al. in the apparatus of Umbach in order to have easy access to the bobbins.

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12. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umbach in view of Takayama et al. As outlined above, Umbach teaches a tape cassette 12 for accommodating a supply of printable tape and suitable for being detachably mounted into the cassette which includes a housing 3. In fact, Umbach teaches all the claimed structure except for a spring located between the bobbin and the housing. Takayama et al. teaches a tape cassette similar to that of Umbach. As illustrated in Figures 17-20 and as outlined in column 20 lines 39-59, Takayama et al. teaches a tape cassette 210 with a housing 201, a bobbin 202, and a spring 204 located between the housing 201 and the bobbin 202, the spring including an end portion 204a which is unitary with the housing at 201d, the arrangement providing a back tension of the tape of the bobbin 202. To one of ordinary skill in the art it would have been obvious to include the spring arrangement taught by Takayama et al. in the invention of Umbach to prevent the tape from moving in a reverse direction as outlined in column 20 lines 53-54 of Takayama et al. Furthermore, there is nothing unobvious in the broad provision of a spring as a biasing means for a bobbin in a tape cassette apparatus since these arrangements are routinely used.

13. Claims 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umbach in view of Sone et al. Insofar as structure is recited, Umbach in view of Sone et al. teaches the claimed invention. As outlined above, Umbach teaches a tape cassette 12 for accommodating a supply of printable tape and suitable for being detachably mounted into the cassette. Umbach teaches all the claimed structure except for a holder as recited. Sone et al. teaches a tape printing

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apparatus for accommodating a supply of printable tape being detachably mounted onto the apparatus. As illustrated in Figures 1 and 3, and as outlined in column 2 lines 58-65, the apparatus of Sone et al. also includes a holder 2 for inserting and removing a supply spool 14 and a take-up spool 16 wherein the relative position corresponds to their position when they are inserted into the tape printing apparatus. As outlined in column 3 lines 34-42, Sone et al. teaches means for defining a path for the tape, the path corresponding to the tape when it is inserted into the tape apparatus. The holder apparatus also includes tongues 4 for releasably holding the spools against rotation. To one of ordinary skill in the art, it would have been obvious to use a holder as taught by Sone et al., in the invention of Umbach in order to assure correct installation of the ribbon spools as taught by Sone et al. in column 1 lines 59-60.

***Allowable Subject Matter***

14. Claims 33, 34, 36-38, 42, 43, and 45 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Ghatt whose telephone number is (703) 308-3698. The examiner can normally be reached on Monday to Friday from 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hilten, can be reached on (703) 308-0719. The fax number for this Group is (703) 308-5841.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.



**REN YAN  
PRIMARY EXAMINER**

***Dave Ghatt***

September 24, 1999